REPORT

TO: Transportation and Communications Committee

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SUBJECT: Regional Aviation System Scenarios

EXECUTIVE DIRECTOR'S APPROVAL:

RECOMMENDED ACTION:
Approve new regional aviation system scenarios for RADAM aviation demand modeling for the 2008 RTP.

SUMMARY:
New regional aviation system scenarios will be modeled for the 2008 RTP using the RADAM regional aviation demand model. These scenarios will forecast regional air passenger and air cargo activity at commercial airports in the region for the years 2010, 2020, 2030 and 2035. They include unconstrained, constrained and preferred scenarios. All three of these scenarios were approved by SCAG's Aviation Task Force at their July 12, 2006 meeting.

BACKGROUND:
Aviation system scenarios that were evaluated for the 1998, 2001 and 2004 regional transportation plans (RTPs) were designed to represent a wide range of future conditions in the regional aviation system. For the 2008 RTP, staff has proposed several new scenarios, described below, that are not significantly different from ones modeled for the 2004 RTP. Again, they include unconstrained, constrained and preferred scenarios, with similar assumptions. The primary difference from the 2004 RTP scenarios is that they will embody a forecast horizon of 2035 instead of 2030. Other differences include an assumption that aviation fuel prices will be significantly higher in the long term, which will place an upward pressure on air fares which could dampen future demand. Commuter airports would be added to these scenarios, which were not included in the modeling for the 2004 RTP. Also, demand from San Diego County will be included in the modeling, with and without a new air carrier airport assumed at MCAS Miramar. It should also be noted that the physical capacity constraints at several airports will be updated and refined, including Bob Hope, San Bernardino, March and Ontario airports.

The proposed new regional aviation system scenarios are as follows:

1. Unconstrained Scenario

The Unconstrained Scenario serves as a "benchmark" for measuring the ultimate ability of the regional aviation system to serve future aviation demand assuming no physical or legally-enforceable policy constraints at air carrier airports in the system. All airports would be assumed to develop in an unconstrained fashion to be able to meet whatever amount of demand

they could serve. The regional unconstrained total would be developed with baseline, induced and catalytic demand included. The Unconstrained Scenario for the 2004 RTP resulted in a regional total of 192 million air passengers (MAP) by 2030.

2. Constrained Scenario

The Constrained Scenario would be similar to the Constrained Scenario modeled for the 2004 RTP (140.8 MAP in 2030). It would have the following characteristics:

- Current physical or legally-enforceable policy constraints and hours of operation assumed at air carrier airports (physical constraints updated by ongoing Airport Capacity Study for Bob Hope, San Bernardino, March and Ontario airports).
- No market incentives assumed.
- Airport ground access improvements assumed to be those currently planned.
- No regional Maglev system assumed.
- March, San Bernardino, Southern California Logistics and Palmdale: cargo charter and corporate only (with commuter/short haul at San Bernardino and Palmdale as well). This reflects assumed reluctance of airlines to invest in service at new/suburban airports.
- Lindbergh Field (SAN) constrained to existing physical capacity, with no new air carrier airports assumed for San Diego County.

3. Preferred Scenario

The Preferred Scenario would be similar to the Regional Aviation Element adopted for the 2004 RTP (170.0 MAP in 2030). It would have the following characteristics:

- Current physical or legally-enforceable policy constraints and hours of operation assumed at air carrier airports.[1]
- Airlines assumed to be willing to invest in service at new/suburban airports.
- Market incentive packages assumed for outlying/suburban airports. These include increased passenger perception of route reliability to those airports (implying future ground access improvements), increased passenger awareness of those airports as travel options (implying marketing programs), low-cost parking, and low-cost shuttle service from activity centers to airports.
- Airport ground access improvements assumed to be those currently planned plus projects from the unconstrained RTP list. These will include new projects from ongoing airport ground access studies being conducted for the 2008 RTP, including a regional HOV/FlyAway system and possible heavy and light rail extensions to airports.
- Full regional Maglev system assumed (the scenario will also be modeled without Maglev).
- Airline "brokering" concept assumed to maximize passenger utilization of Maglev access to suburban airports and minimize airline costs at those airports. This would include integrated Maglev/air fares, increased airline cooperation through code sharing and shared use facilities, and integrated reservation systems between the LAWA airports (i.e. LAX, Ontario and Palmdale) all of which would have some level of international service.

[1] The forecast for March Inland Port in the 2004 RTP assumed no capacity constraints which enabled the facility to reach 8.0 MAP, mainly because of a direct Maglev connection. For the 2008 RTP the physical capacity constraints of the facility as well as the operational constraints of the current joint use agreement with the military will be assessed.

- Increased point-to-point long-haul and international service assumed at medium-sized hub airports because of the increased introduction of new aircraft like the B-787 Dreamliner that can provide this kind of service in a highly efficient fashion.
- Increased willingness of passengers to use outlying/suburban airports assumed because of heightened awareness of competitive flights at those airports.
- Minimal diversion of passengers to airports in other regions assumed (e.g., Bay Area) because of capacity constraints and delays at those airports and higher access costs associated with escalating fuel prices.
- An unconstrained international airport at MCAS Miramar assumed, replacing Lindbergh Field. This scenario would also be modeled without this assumption, and with the assumption that modest capacity expansions would be made at Lindbergh Field within its land area constraints.

FISCAL IMPACT:
None